

REPORT ON MACHINERY.

6811

No. *6811* Port of *West Hartlepool*
 No. in Survey held at *Stockton & Newcastle* Date, first Survey *20th Dec 1887* Last Survey *25th Feb 1888*
 Reg. Book. *on the Steamer "Mimosa"* (Number of Visits *13*) Tons *1013*
 Master *G. I. Bone* Built at *Newcastle* By whom built *Mess^{rs} Edwards & Sons* When built *1888*
 Engines made at *Stockton* By whom made *Mess^{rs} Blair & Co. Lin^{cs}* when made *1888*
 Boilers made at *Stockton* By whom made *Mess^{rs} Blair & Co. Lin^{cs}* when made *1888*
 Registered Horse Power *140* Owners *J. Stephens & Sons* Port belonging to *London*

ENGINES, &c.—

Description of Engines *Inverted Triple Expansion, 3 Cylinders, 3 Cranks.*
 Diameter of Cylinders *20" 33" 54"* Length of Stroke *36"* No. of Rev. per minute *65* Point of Cut off, High Pressure *1/2 stroke* Low Pressure *1/2 stroke*
 Diameter of Screw shaft *11"* Diam. of Tunnel shaft *10 1/4"* Diam. of Crank shaft journals *10 1/4"* Diam. of Crank pin *11 1/4"* size of Crank webs *15 1/2" x 6 3/4"*
 Diameter of screw *14.6* Pitch of screw *14.0* No. of blades *4* state whether moveable *no* total surface *58 sq. ft.*
 No. of Feed pumps *2* diameter of ditto *2 3/4"* Stroke *36"* Can one be overhauled while the other is at work *yes*
 No. of Bilge pumps *2* diameter of ditto *3 1/2"* Stroke *36"* Can one be overhauled while the other is at work *yes*
 Where do they pump from *Engine room After well, Sea and ballast tanks.*
 No. of Donkey Engines *2* Size of Pumps *(4 1/2" x 9") (4" x 8")* Where do they pump from *(Ballast tanks, sea, and all bilges) (Sea, hotwell, & ballast tanks)*
 Are all the bilge suction pipes fitted with roses *yes* Are the roses always accessible *yes* Are the sluices on Engine room bulkheads always accessible *yes*
 No. of bilge injections *one* and sizes *6 dia* Are they connected to condenser, or to circulating pump *Circulating pump.*
 How are the pumps worked *By levers from the After piston rod crosshead*
 Are all connections with the sea direct on the skin of the ship *yes* Are they Valves or Cocks *both*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates *yes* Are the discharge pipes above or below the deep water line *above*
 Are they each fitted with a discharge valve always accessible on the plating of the vessel *yes* Are the blow off cocks fitted with a spigot and brass covering plate *yes*
 What pipes are carried through the bunkers *none* How are they protected *—*
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times *yes*
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges *yes*
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock *new vessel*
 Is the screw shaft tunnel watertight *yes* and fitted with a sluice door *yes* worked from *Top platform of engine room.*

BOILERS, &c.—

Number of Boilers *One* Description *Cyl. mult. Double ended* Whether Steel or Iron *Steel*
 Working Pressure *160 lbs.* Tested by hydraulic pressure to *320 lbs.* Date of test *27th January 1888*
 Description of superheating apparatus or steam chest *none*
 Can each boiler be worked separately *—* Can the superheater be shut off and the boiler worked separately *no Superheater*
 No. of square feet of fire grate surface in each boiler *58* Description of safety valves *Spring* No. to each boiler *2*
 Area of each valve *8.30* Are they fitted with easing gear *yes* No. of safety valves to superheater *—* area of each valve *—*
 Are they fitted with easing gear *—* Smallest distance between boilers and bunkers or woodwork *12"* Diameter of boilers *12' 3 1/8"*
 Length of boilers *14' 3"* description of riveting of shell long. seams *double butt staggered* circum. seams *double lap* Thickness of shell plates *1 3/32"*
 Diameter of rivet holes *1 1/8"* whether punched or drilled *drilled* pitch of rivets *1 in 7 1/2"* trans *3 3/4"* Lap of plating *8 3/16"*
 Percentage of strength of longitudinal joint *85* working pressure of shell by rules *163 lbs.* size of manholes in shell *16" x 12"*
 Size of compensating rings *38" x 24" x 1 3/32"* No. of Furnaces in each boiler *4*
 Outside diameter *3' 5"* length, top *5' 2"* bottom *5' 2"* thickness of plates *9/16"* description of joint *welded* if rings are fitted *no*
 Greatest length between rings *—* working pressure of furnace by the rules *170 lbs.* combustion chamber plating, thickness, sides *9/16"* back *—* top *9/16"*
 Pitch of stays to ditto, sides *7 1/2" x 7 1/2" back* top *7 1/2" x 7 1/2"* If stays are fitted with nuts or riveted heads *nuts* working pressure of plating by rules *167 lbs.* Diameter of stays at smallest part *1 1/16"* working pressure of ditto by rules *195 lbs.* end plates in steam space, thickness *1 3/16"*
 Pitch of stays to ditto *17 1/4" x 17"* how stays are secured *double nut & washer* working pressure by rules *169 lbs.* diameter of stays at smallest part *2 5/8"* working pressure by rules *166 lbs.* Front plates at bottom, thickness *1"* Back plates, thickness *—*
 Greatest pitch of stays *—* working pressure by rules *—* Diameter of tubes *3"* pitch of tubes *4' 3/8" x 4' 1/4"* thickness of tube plates, front *1"* back *7/8"* how stayed *stay tube* pitch of stays *8 3/4" x 8 1/2"* width of water spaces *1 1/4"*
 Diameter of Superheater or Steam chest *—* length *—* thickness of plates *—* description of longitudinal joint *—* diam. of rivet holes *—*
 Pitch of rivets *—* working pressure of shell by rules *—* diameter of flue *—* thickness of plates *—* If stiffened with rings *—*
 Distance between rings *—* working pressure by rules *—* end plates of superheater, or steam chest; thickness *—* how stayed *—*
 Superheater or steam chest; how connected to boiler *—*

4500-0087M

DONKEY BOILER— Description *Vertical, 4 Cross tubes*
 Made at *Stockton* by whom made *Messrs. Riley Bros.* when made *19.11.87* where fixed *In stock hole*
 Working pressure *70 lbs.* tested by hydraulic pressure to *140 lbs.* No. of Certificate *1490* fire grate area *30.6 sq. ft.* description of safety
 valves *spring* No. of safety valves *2* area of each *9.60"* if fitted with easing gear *if steam from main boilers can*
 enter the donkey boiler *no* diameter of donkey boiler *7.0"* length *14.6"* description of riveting *double riv. lap*
 Thickness of shell plates *17/32"* diameter of rivet holes *13/16"* whether punched or drilled *punched* pitch of rivets *2 3/4"* lap of plating *1 1/4"*
 per centage of strength of joint *70* thickness of crown plates *9/16"* stayed by *uptake x 6 stays 1 1/2" dia.*
 Diameter of furnace, top *5.9"* bottom *6.5"* length of furnace *5.2"* thickness of plates *5/8"* description of joint *single riv. lap*
 Thickness of furnace crown plates *9/16"* stayed by *uptake x 6 stays 1 1/2" dia.* working pressure of shell by rules *73 lbs.*
 Working pressure of furnace by rules *68.5 lbs.* diameter of uptake *18"* thickness of plates *7/16"* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *One propeller, One set of bolts & nuts for the*
connecting rod, One set of bolts and nuts for the main bearings, One
set of coupling bolts & nuts, 100 bolts & nuts ass. One set of piston springs,
S.P. cylinder. One set of valves for feed pump also for the bilge pump. 6 Bars of
iron ass. rited.
 The foregoing is a correct description,
W. Blair & Co. Ltd. Manufacturer. of machinery & main boiler.
W. Blair.

General Remarks (State quality of workmanship, opinions as to class, &c.)

Tested the main steam pipe by hydraulic pressure to 320 lbs.
per square inch and found it tight.

The machinery and boiler of this vessel have been constructed
under Special Survey, and are of a good quality of workman-
ship. The machinery and main boiler have been examined
under steam, the safety valves adjusted, and found to
work well and will be in safe and efficient working
condition and eligible, in my opinion, to have the
notification L.M.C.2.88. recorded in the Register of
this Society when the following work has been executed
to the satisfaction of a Surveyor of this Society.

Openings to be cut in the sides of engine room well to admit
bilge water to the hoses in the well. (Donkey boiler to be fitted
with the necessary mountings and examined under steam).

This vessel has proceeded to the Tyne, where the work will
be completed.

The above requirements have been satisfactorily
Completed.

John Wallis Esq.

It is submitted that this vessel
is eligible to have the notification
L.M.C.2.88. recorded
W. Wallis 19/3/88

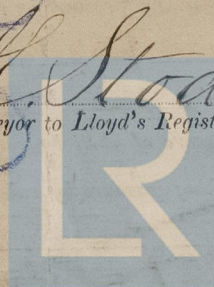
The amount of Entry Fee .. £ 2 : 0 : 0 received by me
 Special .. £ 21 : 0 : 0
 Donkey boiler Fee .. £ : :
 Certificate (if required) .. £ : :
 To be sent as per margin.
 (Travelling Expenses, if any, £)

Committee's Minute

+ L.M.C.2/88

TUES 20 MARCH 1888

Engineer-Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register
Foundation